

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Clinico-epidemiological Characteristics of Kawasaki-Like Disease in COVID-19 Pediatric Patients: A Protocol for Rapid Living Systematic Review
<b>AUTHORS</b>	Sinha, Abhinav; Nayak, Swetalina; Dehuri, Priyadarshini; Kanungo, Srikanta; Pati, Sanghamitra

## VERSION 1 – REVIEW

<b>REVIEWER</b>	Biswadev Mitra Alfred Health
<b>REVIEW RETURNED</b>	13-Jun-2020

<b>GENERAL COMMENTS</b>	<p>This is certainly topical area and of immense public health interest. The proposed systematic review is clearly presented and a PRISMA checklist is provided.</p> <p>The search strategy is extensive and should include relevant studies.</p> <p>I have some suggestions for improvement:</p> <ol style="list-style-type: none"><li>1. Please clarify your choice of databases and search engines. Although Pubmed includes Ovid Medline citations, it is preferred that the Medline search is performed through Ovid. Similarly, Google Scholar is not adequate for searching other databases. Hence your statement that "Pubmed and Google Scholar search engines will be used to retrieve studies" is not preferred.</li><li>2. Medline should be added to the search engines in the abstract</li><li>3. Please spell out abbreviations when first used, e.g. PT, PTT, ECHO</li><li>4. Please define "COVID-19"- will you mandate that all included cases have a confirmed positive RT-PCR for SARS-Cov-2?</li><li>5. Please define "Kawasaki-like disease symptoms". Does this have to be explicitly stated and diagnosed by the authors of included manuscripts, or will this be inferred by the reviewer?</li><li>6. I don't understand the relevance for the inclusion criteria of "living in COVID-19 affected countries." Is this required?</li><li>7. Limiting the inclusion to "English language" only is a major limitations. Are you able to include some translations services?</li><li>8. The data items needs to be be explicitly spelled out. For example for "demographic attributes", rather than state "like age, sex, etc.", please state which variables you will extract and report. You have stated that a "preformed data extraction sheet" will be used. It would be helpful to add this sheet as an appendix.</li><li>9. No outcome measures are listed under data items.</li><li>10. The section on "data synthesis" is quite under-developed. I assume you are attempting to describe a meta-analysis. Please specify the variables, how they will be extracted and how they will be combined.</li><li>11. Is there any option to seek additional data from authors?</li></ol>
-------------------------	---

	12. Please describe the methodology of making this SR a "living" review. In particular, please describe the issues associated with team and workflow management, meta-analysis, and publication. A discussion around the major elements of a LSR as described by Elliott, et al. ( <a href="https://doi.org/10.1371/journal.pmed.1001603">https://doi.org/10.1371/journal.pmed.1001603</a> ) will be useful.
--	--

<b>REVIEWER</b>	Ian Fyffe Simon Fraser University, Canada
<b>REVIEW RETURNED</b>	17-Jul-2020

<b>GENERAL COMMENTS</b>	<p>A well thought out manuscript. The only issues I see are minor English ones. For example:</p> <p>Abstract line 24: "The COVID-19 outbreak has posed a major challenge to the healthcare providers." should be changed to "...to healthcare providers".</p> <p>Abstract line 55: " A descriptive and quantitative analysis will be done for the data." should be changed to "...analysis will be completed."</p> <p>Page 5 line 7 "...the results in a peer-reviewed journal and present at conference" should be changed to "...at a conference"</p> <p>Page 5 line 24 "Comprehensive assessment..." should be changed to "A comprehensive assessment..."</p> <p>Page 5 line 48 "...a major challenge to the healthcare providers" should be changed to "...to healthcare providers"</p> <p>Page 5 line 49 "...Due to communicable nature of this virus" should be changed to "Due to the communicable nature of this virus"</p> <p>Page 5 line 53 "The recent being multisystem inflammatory syndrome..." should be changed to "One of the most recent being..."</p> <p>Page 5 line 56 "Although, it has been observed that geriatric people with underlying comorbidities are more vulnerable to severe form of disease and require intensive care support but a few children getting hospitalized too is evident." should be changed to "Although it has been observed that older adults with underlying comorbidities are vulnerable to a more severe form of the disease which may require intensive care support, some children are also hospitalized"</p> <p>Page 6 line 8: "Recently, clusters of children and adolescents from Europe and North America were reported to be admitted in intensive care units with a multisystem inflammatory syndrome with clinical features resembling to Kawasaki-like disease and toxic shock syndrome." should be changed to "Recently, clusters of children and adolescents from Europe and North America have reportedly been admitted to intensive..."</p> <p>Page 6 line 46: "5. Having acute gastrointestinal like vomiting, diarrhea or abdominal pain." should be changed to "Having acute gastrointestinal symptoms like..."</p>
-------------------------	--

<b>REVIEWER</b>	Reo Tanoshima Yokohama City University Hospital, Japan
-----------------	---

<b>REVIEW RETURNED</b>	02-Nov-2020
<b>GENERAL COMMENTS</b>	<p>[Major comments]</p> <p>This manuscript describes a protocol for rapid living systematic review of Kawasaki-like disease in pediatric COVID-19 patients. This is the protocol of a very important research theme to identify etiology and treatment of the disease. The protocol has followed PRISMA-P. The main issue of this protocol is that the primary endpoint of the systematic review is vague. Expected outcomes are described in page 10, but 'etc' and 'e.g.' indicate non-specific feature of this systematic review. Please specify what information the authors will collect and outcomes of this systematic review. 'Data Items' and 'Outcomes and prioritization' should be specified. 'Strengths and limitations of this study' and 'Expected Outcome(s)' should not be listed in Discussion section because they are the key of the protocol. Please also describe why the authors will not use Embase for systematic search. Why will they target the literatures only in English? Despite challenge of translation of the language, mitigating Tower of Babel bias, especially in the global pandemic of COVID-19, is important. Please consider including the literatures written in multiple languages.</p> <p>[Minor comments]</p> <ol style="list-style-type: none"> <li>1. The title is misleading. The authors' target it Kawasaki-like disease after COVID-19 infection, and it is not yet determined whether these are Kawasaki disease. The authors describe the diagnostic criteria of Kawasaki-like disease by WHO. Hence, 'Kawasaki Disease' on the title should be 'Kawasaki-like Disease'.</li> <li>2. Page 6. In Exclusion criteria, please describe if the authors exclude in vitro studies in addition to animal ones.</li> <li>3. Page 6. Please specify what 'living in COVID-19 affected countries' means.</li> <li>4. Page 7, line 13. Please change 'like' to 'such as'</li> <li>5. Bottom of page 8. Please change 'like' to 'such as'</li> </ol>

### VERSION 1 – AUTHOR RESPONSE

#### Responses to Reviewer 1:

1. For Medline, we have included Pubmed and also now added Ovid as well as Embase. Along with Medline other databases will be searched using Google Scholar, ProQuest and Ebsco database will be covered.
2. Medline has been added in the abstract.
3. All abbreviations when used for the first time have been spelled out.
4. Included cases of COVID-19 infection should be confirmed either by RT-PCR or antigen test or serology positive or the case be a likely contact of COVID-19 patient as stated by WHO in preliminary case definition for this condition which is mentioned in introduction part of the manuscript.
5. "Kawasaki-like disease symptoms" if not explicitly stated and diagnosed by authors of included manuscripts will be inferred by the reviewer.
6. "Living in COVID-19 affected countries" has been omitted. It did not seem relevant.
7. We will include translation services and all languages will be considered for review.
8. Data items have been spelled and data extraction sheet has been added as an appendix.
9. Outcome measures have been listed under data items.

10. Variables to be collected have been specified and analysis part explained.
11. Additional data if needed from authors of included study will be taken by contacting them through mail. It is already mentioned under data management. I have highlighted it.
12. This SR is living as it has search strategy maintained and continuously fed into SR workflow with the continuous and coordinated efforts of all authors. The publication will be updated at an interval till a point where further decision for updating will be made (mentioned in the manuscript)

#### Responses to Reviewer 2:

All minor English changes as suggested in the manuscript have been taken note of and changes accordingly.

#### Responses to Reviewer 3:

##### Major Comments

1. Expected outcomes have been mentioned under data items and changed making it more specific.
2. All information to be collected has been mentioned and a supplementary file (data extraction form) added.
3. 'Strengths and Limitations' and 'Expected Outcomes' have been changes from Discussion section.
4. Embase included for Medline search
5. Literature will be now in any language and we will opt for translation services.

##### Minor Comments

1. Title has been changed to "Kawasaki-Like Disease"
2. In Vitro studies will be excluded (Mentioned in exclusion criteria)
3. "Living in COVID-19 Countries" did not seem relevant and thus has been removed.
4. Such as has been done
5. Such as has been done

### VERSION 2 – REVIEW

<b>REVIEWER</b>	Biswadev Mitra Monash university, Australia
<b>REVIEW RETURNED</b>	29-Nov-2020

<b>GENERAL COMMENTS</b>	Thank you for considering my comments. I look forward to the systematic review
-------------------------	---

<b>REVIEWER</b>	Reo Tanoshima Department of Pediatrics Yokohama City University Hospital
<b>REVIEW RETURNED</b>	30-Nov-2020

<b>GENERAL COMMENTS</b>	The authors answered the questions and comments properly.  Below is my final minor comment. Page 9 Line 27: Please avoid using 'such as' in the expected outcomes. The outcomes should be determined before starting the study and have to be specific. Please leave important outcomes and delete 'such as' here.
-------------------------	---